

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
4 August 2005 (04.08.2005)

PCT

(10) International Publication Number  
**WO 2005/071768 A2**

(51) International Patent Classification<sup>7</sup>: H01L 41/09,  
41/04

(74) Agents: ROLFES, Johannes, G., A. et al.; Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).

(21) International Application Number:  
PCT/IB2005/050106

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(22) International Filing Date: 10 January 2005 (10.01.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
04100219.7 22 January 2004 (22.01.2004) EP

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (for all designated States except US): KONINKLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventors; and

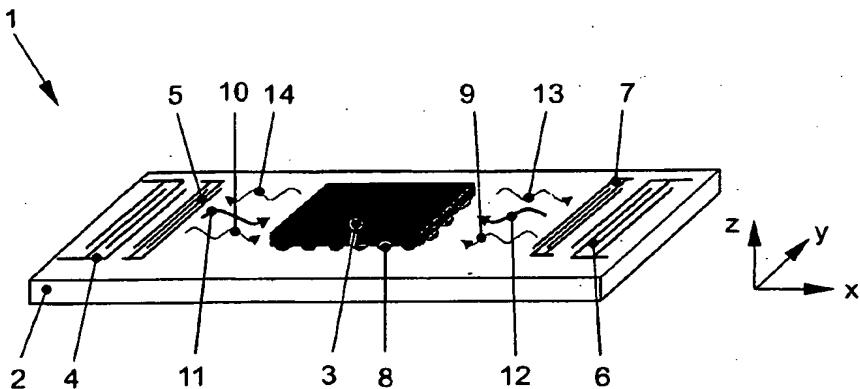
(75) Inventors/Applicants (for US only): VERMEULEN, Marcus, M., P., A. [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). PEETERS, Felix, G., P. [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). LIESS, Martin, D. [DE/DE]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). FEENSTRA, Philippus, J. [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). BREEDVELD, Pieter, C. [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD FOR DETERMINING A POSITION OF A DISPLACEABLE ELEMENT AS WELL AS A WAVE MOTOR



WO 2005/071768 A2

(57) Abstract: Method for determining the position of an element (3) which is displaceable relative to a stator (2). The stator (2) comprises at least one transducer (4-7). An electric signal is applied to said transducer (4-7) due to which a wave is generated in the surface of the stator (2). At least part of said wave is reflected to the transducer (4-7) by the displaceable element (3). By means of a processor the position of the displaceable element (3) relative to the stator (2) is determined from the reflected wave.